

**Work Order ID 74879**

October 13, 2011 10:42:03 AM

**\*74879\***

Page 1

Item ID: D3278-2

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Support

Stop

**\*NS2\***

Start Date: 10/13/11 Start Qty: 40.00

**\*40\***

Cust Item ID:

Required Date: 10/27/11 Req'd Qty: 40.00

**\*40\***

Customer:

Reference:

Approvals:

Process Plan: M.L.JDate: 11/10/14

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
100		0.00							
<b>*100*</b>	SHEAR								
Bandsaw									
Jeaspa Bandsaw		0.00							
	<b>Memo</b>								
	Cut blank: 2.00" x 1.00" x 2.550" long								
110		0.00							
<b>*110*</b>	HAAS CNC VERTICAL MACHINING #1								
HAAS 1									
HAAS CNC vertical machine #1		0.00							
	<b>Memo</b>								
	1- Machine as per Folio FA405 and Dwg D32782- Deburr and TumbleIdentify as D3278-2								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
<b>*120*</b>									
QC									
Quality Control		0.00							
	<b>Memo</b>								

ML 11/10/201440 ØB-A 11/10/2740 ØB-A 11/10/2740 Ø

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 74879**

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Page 2

Item ID: D3278-2

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Support

Stop

**\*NS2\***

Start Date: 10/13/11

Start Qty: 40.00

**\*40\***

Cust Item ID:

Required Date: 10/27/11

Req'd Qty: 40.00

**\*40\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start

**\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
Description

130

QC8- Inspect parts - second check

**\*130\***

QC

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

**\*140\***

HandFinish

Hand Finishing

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

**\*150\***

Powdercoat

Powder Coating

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

0.00

Re 11-12-28

40 f

0.00

0.00

40 11-10-31

0.00

Memo

9'30 0.00

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

10'00

W118434 3200F

40 X 6 M 11/11/01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: NC Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID** 74879

**\*74879\***

October 13, 2011 10:42:03 AM

Page 3

**Item ID:** D3278-2

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

**Revision ID:**

**Item Name:** Support

Stop

**\*NS2\***

**Start Date:** 10/13/11    **Start Qty:** 40.00

**\*40\***

**Cust Item ID:**

**Required Date:** 10/27/11    **Req'd Qty:** 40.00

**\*40\***

**Customer:**

**Reference:**

**Approvals:** Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start

**\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**\*NR2\***

**Sequence ID/  
Work Center ID**

**Operation  
Description**

**Set Up/  
Run Hours**

**Tool ID**

**Tool #**

**Plan  
Code**

**Accept  
Qty**

**Reject  
Qty**

**Reject  
Number**

**Insp.  
Stamp**

160

**\*160\***

QC

Quality Control

QC3- Inspect Part Finish

0.00

40 X / M 11/11/01  
COMPLETED

170

**\*170\***

Packaging

Packaging

Identify as per dwg & Stock Location G.A

0.00

11/11/02

180

**\*180\***

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

11/11/02 J

11/11/02  
MO

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Picklist Print**

Page 1

October 13, 2011 10:42:07 AM

Work Order ID: 74879

**\*74879\***

Parent Item: D3278-2

**\*D3278-2\***

Parent Item Name: Support

Start Date: 10/13/11

Required Date: 10/27/11

Start Qty: 40.00

Required Qty: 40.00

**Comments:** IPP: A04.04.19 New issue KJ/JLM  
 IPP B 07.09.06 Rev C dwg EC Verified by: JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.000X02.00 0		Purchased	No			100	f	43.9660	0.2337	9.84			

**\*M6061T6R1 000X02 000\***

6061-T6 Bar 1.00 x 2.00

\*\*

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT004	43.966	
112567	16.6	
118106	7.046	
→ 119007	20.32	9.9      and 110/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	74879
Description: Support	Part Number:	D3278-2
Inspection Dwg: D3278	Rev: C	Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

First Article     Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.005/-0.000	Ø0.098	✓		Vern	GA-01
0.359	+/-0.005	0.359	✓		"	"
0.609	+/-0.010	0.613	✓		"	"
0.250	+/-0.010	0.250	✓		"	"
1.480	+/-0.005	1.479	✓		"	"
R0.125	+/-0.010	R0.125	✓		R-G	ref.
0.119	+0.005/-0.004	0.118	✓		Vern	GA-01
2.439	+/-0.010	2.440	✓		"	"
1.980	+/-0.010	1.980	✓		"	"
R0.13	+/-0.030	R0.125	✓		R-G	ref.
Ø0.257	+0.005/-0.000	Ø0.258	✓		Vern	GA-01
R0.375	+/-0.010	R0.375	✓		R-G	ref.
0.875	+/-0.010	0.875	✓		Vern	GA-01
0.500	+/-0.010	0.500	✓		"	"
R0.400	+/-0.010	R0.400	✓		R-G	ref.
R1.00	+/-0.030	R1.000	✓		"	"
1.720	+/-0.010	1.721	✓		Vern	GA-01
R0.125	+/-0.010	R0.125	✓		R-G	ref.
0.125	+/-0.010	0.127	✓		Vern	GA-01

Measured by:	J.A.	Audited by:	P.	Prototype Approval:	N/A
Date:	11/10/27	Date:	11.10.28	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.04.19	New Issue P/O D3278-041	KJ/JLM	
B	05.06.08	0.359 was 0.365; 0.119 was 0.125	KJ/JLM	
C	07.09.26	Dimensions updated per Dwg Rev. C	KJ/EC	J.E. E

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

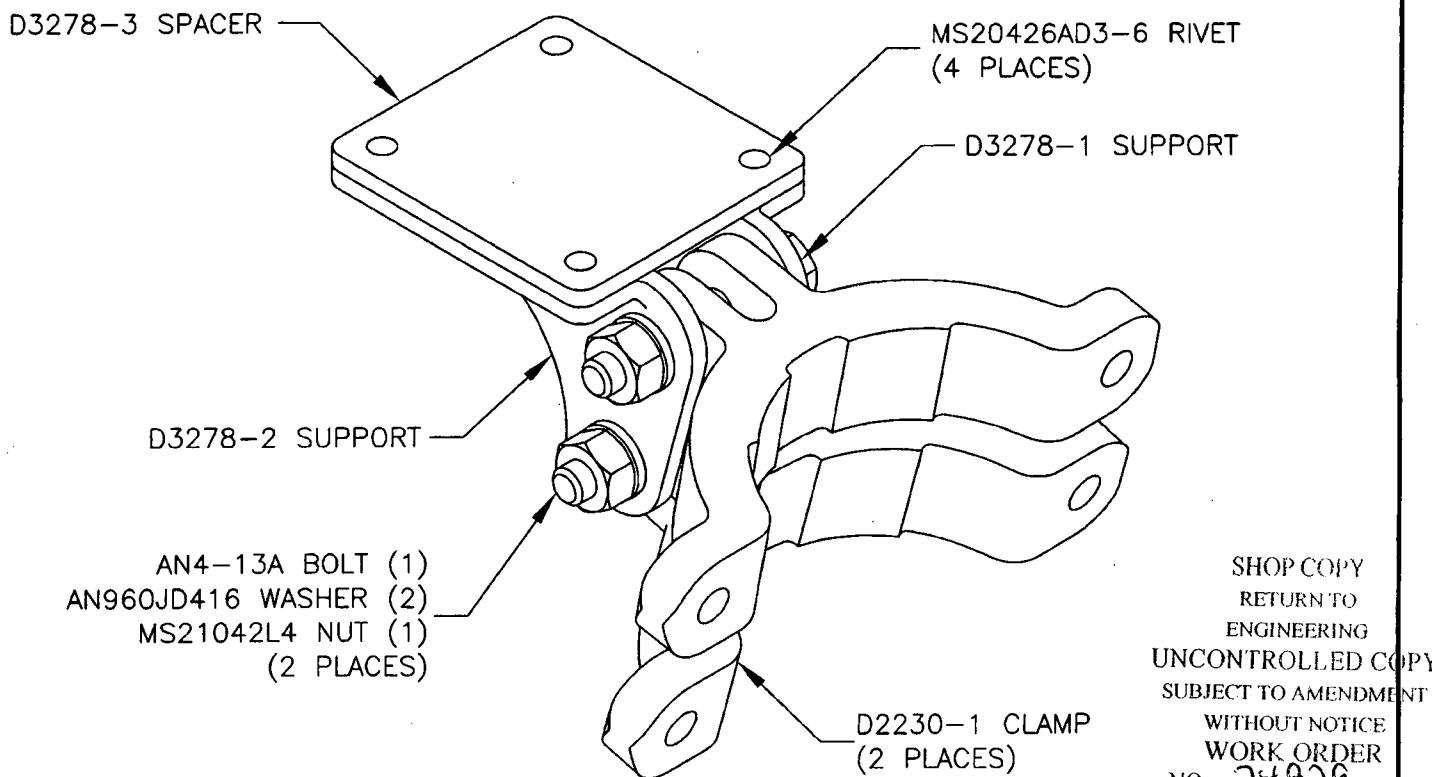
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**DART**

DESIGN <i>GP</i>	DRAWN BY <i>BC</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA
CHECKED <i>B</i>	APPROVED <i>JH</i>	DRAWING NO. D3278
DATE 07.07.24		REV. C SHEET 1 OF 3
		TITLE SUPPORT ASSEMBLY
		SCALE NTS

**RELEASED**  
07 08-06D3278-041 SUPPORT ASSEMBLY

Qty	Part Number	Description
X	D3278-041	SUPPORT ASSEMBLY
2	D2230-1	CLAMP
1	D3278-1	SUPPORT
1	D3278-2	SUPPORT
1	D3278-3	SPACER
2	AN4-13A	BOLT
4	AN960JD416	WASHER
4	MS20426AD3-6	RIVET
2	MS21042L4	NUT

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

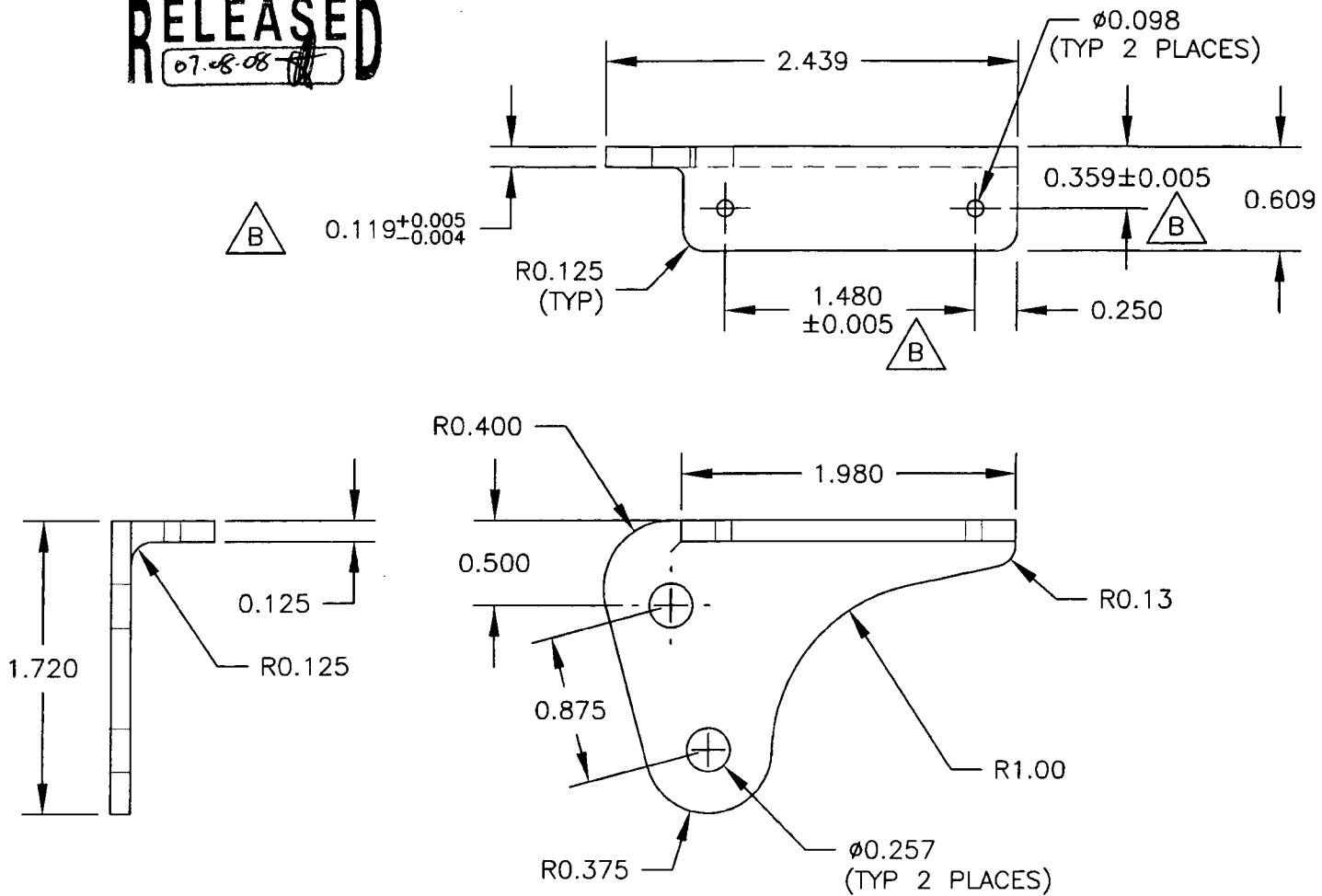
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action      Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**DART**

DESIGN <i>GP</i>	DRAWN BY <i>JL</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>B</i>	APPROVED <i>H</i>	DRAWING NO. D3278	REV. C SHEET 2 OF 3
DATE 07.07.24		TITLE SUPPORT ASSEMBLY	SCALE 1:1

**RELEASED**  
07-08-08**D3278-1 SUPPORT (SHOWN)****D3278-2 SUPPORT (OPPOSITE)**

- 1) MACHINE PER DWG FILE "D3278-1.SLDPRT"
- 2) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR  
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
PER AMS-QQ-A-200/8 (OR AMS 4160)  
(REF. DART SPEC. M6061T6B)
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

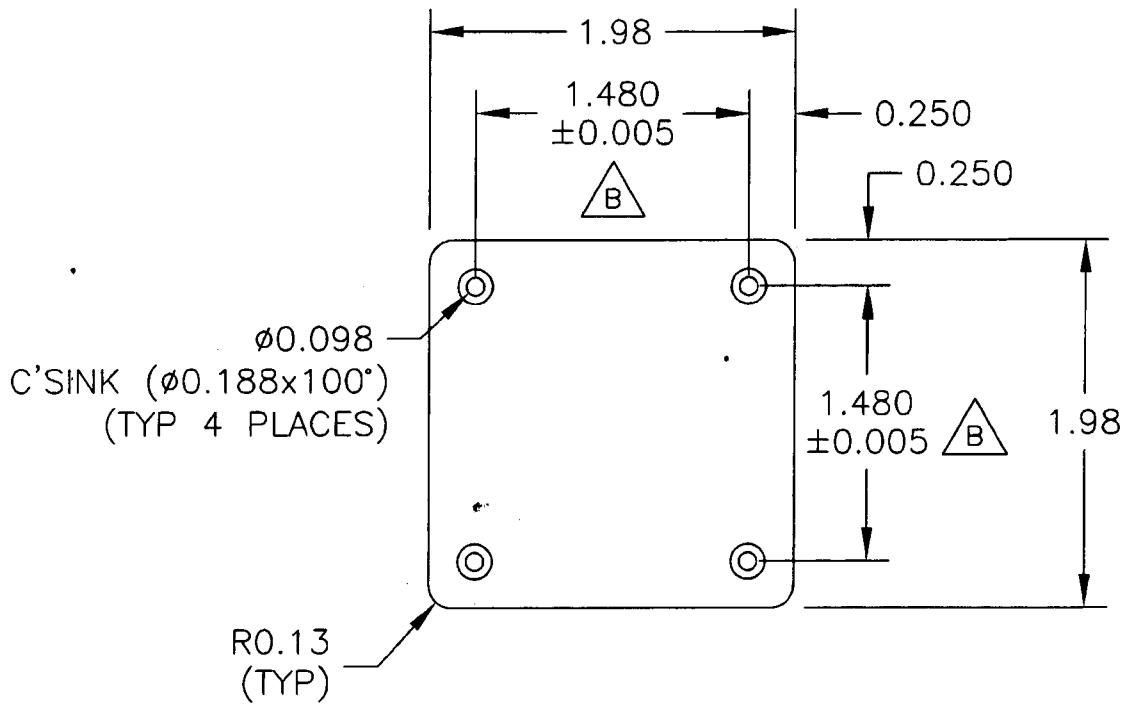
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**DART**

DESIGN <i>GP</i>	DRAWN BY <i>JG</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>AB</i>	APPROVED <i>JH</i>	DRAWING NO. D3278	REV. C SHEET 3 OF 3
DATE 07.07.24		TITLE SUPPORT ASSEMBLY	SCALE 1:1

**RELEASED**  
07.08.08**D3278-3 SPACER**

- 1) MATERIAL: DELRIN II 150E OR ACETRON GP ACETAL  
(REF. DART SPEC. M-DELRIN-B0.125x2.000) OR  
DELRIN II 150E OR ACETRON GP ACETAL  
(REF. DART SPEC. M-DELRIN-S.125)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

b7b b7c

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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